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**FINAL DEMOLITION WORK PROCEDURE FOR BUILDINGS 1121 AND 1323,
NON-TIME-CRITICAL REMOVAL ACTION FOR SOLID WASTE DISPOSAL
AREA RADIOLOGICAL HOT SPOT REMOVAL AND BUILDING DEMOLITION
SITE 12**

04/01/2013
TETRA TECH EC, INC.

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**Base Realignment and Closure
Program Management Office West
1455 Frazee Road, Suite 900
San Diego, California 92108-4310**

**CONTRACT No. N62473-10-D-0809
CTO No. 0013**

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DEMOLITION WORK PROCEDURE
FOR BUILDINGS 1121 AND 1323
April 2013**

DCN: RMAC-0809-0013-0008

**NON-TIME-CRITICAL REMOVAL ACTION FOR SOLID WASTE DISPOSAL AREA
RADIOLOGICAL HOT SPOT REMOVAL AND BUILDING DEMOLITION
INSTALLATION RESTORATION SITE 12
NAVAL STATION TREASURE ISLAND
SAN FRANCISCO, CALIFORNIA**

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Figure 1-1	Buildings 1121 and 1323 Location Plan
Figure 1-2	Project Organization Chart

ACRONYMS AND ABBREVIATIONS

ACM	asbestos-containing material
APP	Accident Prevention Plan
CDPH	California Department of Public Health
CSO	Caretaker Site Office
DON	Department of the Navy
HRA	Historical Radiological Assessment
IR	Installation Restoration (Program)
LLRW	low-level radioactive waste
NAVSTA TI	Naval Station Treasure Island
NTCRA	non-time-critical removal action
SSHP	Site Safety and Health Plan
SWDA	Solid Waste Disposal Area
TtEC	Tetra Tech EC, Inc.

1.0 INTRODUCTION

This Demolition Work Procedure describes the activities that will be undertaken at Buildings 1121 and 1323, located within Solid Waste Disposal Area (SWDA) A & B near Westside Drive within Installation Restoration (IR) Site 12 at Naval Station Treasure Island (NAVSTA TI), San Francisco, California (Figure 1-1). The buildings will be radiologically surveyed and remediated (if required) in accordance with the Department of the Navy (DON)-approved Task-specific Plan. Once the survey results indicate that the buildings are not radiologically impacted and all low-level radioactive waste (LLRW) has been turned over to the DON's LLRW contractor, the buildings will be demolished to the concrete foundation, which will remain in place. Tetra Tech EC, Inc. (TtEC) has been contracted by the DON to perform this work at NAVSTA TI for the Base Realignment and Closure Program Management Office West under Naval Facilities Engineering Command Southwest Contract No. N62473-10-D-0809, Contract Task Order 0013.

TtEC personnel will manage the demolition of the buildings. A Project Organization Chart is included as Figure 1-2. The Accident Prevention Plan (APP)/Site Safety and Health Plan (SSHP) (TtEC 2012) is incorporated into this Demolition Work Procedure by reference. Quality control requirements and the definable features of work applicable to the project are addressed in the Project Contractor Quality Control Plan, Attachment 2 of the Non-Time-Critical Removal Action (NTCRA) Work Plan (TtEC 2013).

1.1 SITE DESCRIPTION

Building 1121 is located on the northwest end of Treasure Island as shown on Figure 1-1. It is a two-story wood frame structure on a concrete slab foundation with a mix of composition shingle and built-up roof. The original exterior stucco walls have been covered with vinyl siding. The building footprint measures approximately 22 feet wide by 130 feet long by 22 feet tall. Building 1121 is a six-unit apartment complex formerly used for housing purposes (Photographs 1-1 and 1-2).

Building 1323 is also located on the northwest end of Treasure Island as shown on Figure 1-1. It is a two-story wood frame structure on a concrete slab foundation with a composite shingle roof. The building footprint measures approximately 34 feet wide by 154 feet long by 22 feet tall. Building 1323 is a six-unit apartment complex formerly used for housing purposes (Photograph 1-3).

Previous asbestos surveys confirmed the presence of asbestos in both Buildings 1121 and 1323. The main areas of concern in Building 1121 are the mechanical rooms and attics. Materials containing asbestos include, but are not limited to, the floor tiles with mastic, air-cell thermal system insulation, white joint wrap tape, stucco, and linoleum floor sheeting. For Building 1323,

the main area of concern is around the sinks. Materials containing asbestos include, but are not limited to, linoleum floor sheeting, floor tiles with mastic, and the white sink undercoating.

Previous lead-based paint surveys confirmed the presence of lead-based paint in both Buildings 1121 and 1323. According to the Lead Management Plan, FY 1996 (PWC 1996a), lead-based paint was identified on a majority of the interior wood substrate components within the 1100's housing community. Also, according to the Lead Management Plan, FY 1970 (PWC 1996b), lead-based paint was identified on the stairway tread within the 1300's housing community.

The Historical Radiological Assessment (HRA) identified the radiological contamination potential for the SWDAs within IR Site 12 as "unlikely" and recommended radiation monitoring during excavation of identified SWDAs (Weston 2006). Based on results from ongoing NTCRAs and other investigations, the SWDAs were found to be contaminated with radiological items or contamination containing radium-226.



Photograph 1-1. Building 1121 (view from the south)



Photograph 1-2. Building 1121 (view from the southwest)



Photograph 1-3. Building 1323 (view from the west)

1.2 DOCUMENT ORGANIZATION

The remainder of this work procedure includes a description of the tasks associated with preparing for and executing the demolition effort (Section 2.0), a Traffic Control Plan (Section 3.0), and a list of references (Section 4.0).

2.0 DEMOLITION ACTIVITIES

This section discusses the primary activities associated with the demolition of Buildings 1121 and 1323, which include the following:

- Notifications and permits
- Work zone establishment
- Geophysical survey and decommissioning of utilities
- Asbestos abatement
- Radiological survey
- Building demolition
- Dust control
- Debris handling and storage

2.1 NOTIFICATIONS AND PERMITS

Before beginning fieldwork, TtEC will obtain authorization from the NAVSTA TI Caretaker Site Office (CSO) to demolish the buildings. The DON Remedial Project Manager and appropriate NAVSTA TI security and fire department personnel will be notified of the planned activities and associated schedule. Advance notification of demolition plans, the project schedule, and the names and phone numbers of responsible project staff will be provided to the Resident Officer in Charge of Construction, CSO, and NAVSTA TI security and fire department personnel.

A notification of intent to demolish will be submitted for each building to the Bay Area Air Quality Control Management District at least 10 working days before commencement of the demolition.

2.2 WORK ZONE ESTABLISHMENT

Before demolition activities are initiated, a work zone will be established to keep personnel who are not working on the demolition of Buildings 1121 and 1323 from the demolition area. Demarcation of the work zone may consist of using delineators, temporary fencing, caution tape, and signs. Work zone controls will remain in place for the duration of the demolition activities.

2.3 GEOPHYSICAL SURVEY AND DECOMMISSIONING OF UTILITIES

Before beginning intrusive activities, an engineering survey and a geophysical survey will be performed to identify utilities serving each building. Active utilities identified during the geophysical survey will be terminated, vented, and capped, as appropriate. The survey will also

identify other nearby active utilities that could be at risk of damage as a result of the demolition activities, and measures will be implemented to ensure their protection. The engineering survey will also identify other environmental issues associated with the buildings.

2.4 ASBESTOS ABATEMENT

A licensed asbestos abatement contractor will be mobilized to remove the asbestos. The removal of asbestos-containing material (ACM) will be planned and performed independently of the demolition task and is not addressed further in this work procedure, except to the extent that abatement efforts must be coordinated with demolition activities. The asbestos abatement plan will be submitted under separate cover for review by the DON. Any ACM will be bagged and labeled properly. Bagged ACM will be staged and remain within the building pending radiological surveys. If the surveys indicate radioactivity above the release criteria, the ACM will be turned over to the DON's LLRW contractor. If the surveys do not indicate radioactivity above the release criteria, this material will be disposed of in a landfill permitted to accept this material in accordance with the Waste Management Plan (Attachment 5 of the NTCRA Work Plan [TtEC 2013]).

2.5 RADIOLOGICAL SURVEY

Although there is no evidence that Buildings 1121 and 1323 were radiologically impacted, they are located within a Class 1 survey unit in IR Site 12. Prior to demolition of the buildings, radiological surveys of the interiors and exteriors will be performed to determine whether radiologically impacted soil has been tracked into the buildings or whether the wind has deposited radiologically impacted soil onto the exterior surfaces. The interior and exterior of the buildings will be radiologically surveyed using the Atomic Energy Commission Regulatory Guide 1.86 established in the IR Site 12 NTCRA Work Plan (Shaw 2007) and as described in the DON-approved Task-specific Plan. If any contamination is identified, those locations will be remediated and resurveyed until results indicate that the release criteria have been achieved. Once remediation activities are complete (if required), the survey data for the buildings will be submitted to the DON for transmittal to the California Department of Public Health (CDPH).

2.6 BUILDING DEMOLITION

Demolition activities will be conducted in accordance with the applicable safety methods outlined in the Demolition Safety Manual (National Demolition Association 2004), Safety and Health Program Requirements for Demolition Operations (ANSI 2006), Safety and Health Requirements Manual (United States Army Corps of Engineers EM 385-1-1) (USACE 2008), and the Technical Manual on Demolition (Occupational Safety and Health Administration). The buildings will be demolished after written concurrence to proceed is received from the DON, and CDPH concurs that the building materials are not radiologically impacted.

Lead-based paint was confirmed to be present in both Buildings 1121 and 1323. Water will be used to wet down any loose paint chips from the buildings prior to demolition. To protect the health and safety of project personnel and the public, ambient air monitoring will be performed and dust control measures will be implemented during the building demolition activities. Only an operator in an excavator with an enclosed cab and a water truck will be inside the work zone during demolition activities.

The TtEC Site Superintendent and/or designated demolition competent person will examine the underlying structural framing to determine the safest, most effective demolition approach and sequence. A critical safety procedure is to protect adjacent active structures. If any debris flies out, all work will be stopped immediately until further inspection by the Site Superintendent and/or designated demolition competent person. Demolition of the buildings will be accomplished in a controlled manner using an excavator with debris shield mounted on the front and top of the excavator cab.

2.7 DUST CONTROL

Dust control measures consisting of an application of a water mist will be implemented as necessary. Demolition activities will be temporarily halted and reevaluated should visible dust be released into the air. Ongoing air monitoring will be used to document the effectiveness of the physical controls. Demolition activities will be halted during high wind conditions as discussed in the APP/SSHP (TtEC 2012).

2.8 DEBRIS HANDLING AND STORAGE

Demolition debris will be sized and loaded into bins and/or trucks to minimize impacts to the adjacent residents. The loaded containers will be transported off-site for disposal at an approved landfill in accordance with the Waste Management Plan (Attachment 5 to the NTCRA Work Plan [TtEC 2013]) after being radiologically scanned in accordance with Standard Operating Procedure 011, Gamma Screening of Trucks Using the Stationary Portal Monitor and Using Portable Survey Instrumentation. Any chipped lead-based paint will be bagged and labeled properly. Bagged lead-based paint will be staged and will remain within the building pending radiological surveys, similar to the ACM.

3.0 TRAFFIC PLAN

This section addresses the measures to be implemented to control vehicular traffic during demolition activities.

3.1 TRAFFIC SAFETY MEASURES

TtEC will maintain delineators, temporary fencing, caution tape, and signs for traffic control to ensure the safety of construction and NAVSTA TI personnel during the demolition activities.

Access to roadways and around the work area will be maintained during demolition activities. Dust suppression measures will be implemented, as necessary, to minimize the generation of dust by trucks traveling on the site roadways and work area.

Materials or equipment will not be staged where they could interfere with safe passage. In addition, TtEC personnel and its subcontractors will adhere to NAVSTA TI speed limits.

3.2 TRAFFIC CONTROLS

Traffic controls will be implemented to minimize impacts to traffic flows and ensure the safety of everyone at NAVSTA TI. As applicable, traffic controls include, but are not limited to the following:

- Traffic routes will be planned and maintained to ensure safe and efficient equipment and vehicular travel in the vicinity of the buildings and minimize potential impacts to traffic in surrounding areas.
- Clear points of access will be maintained at the work area to allow for safe and efficient entry and exit of equipment and vehicles.
- Fencing, delineators, cones, flags, signs, and/or other traffic control measures will be used, as needed.
- Sufficient area will be provided to accommodate maneuvering of all equipment and vehicles used in the work.
- Close coordination will be maintained between the DON, other NAVSTA TI contractors, and residents to ensure safety and minimize impacts to other activities within NAVSTA TI.

All traffic control activities shall conform to the applicable specifications of the State of California Manual on Uniform Traffic Control Devices, Part 6 Temporary Traffic Control (Caltrans 2010).

4.0 REFERENCES

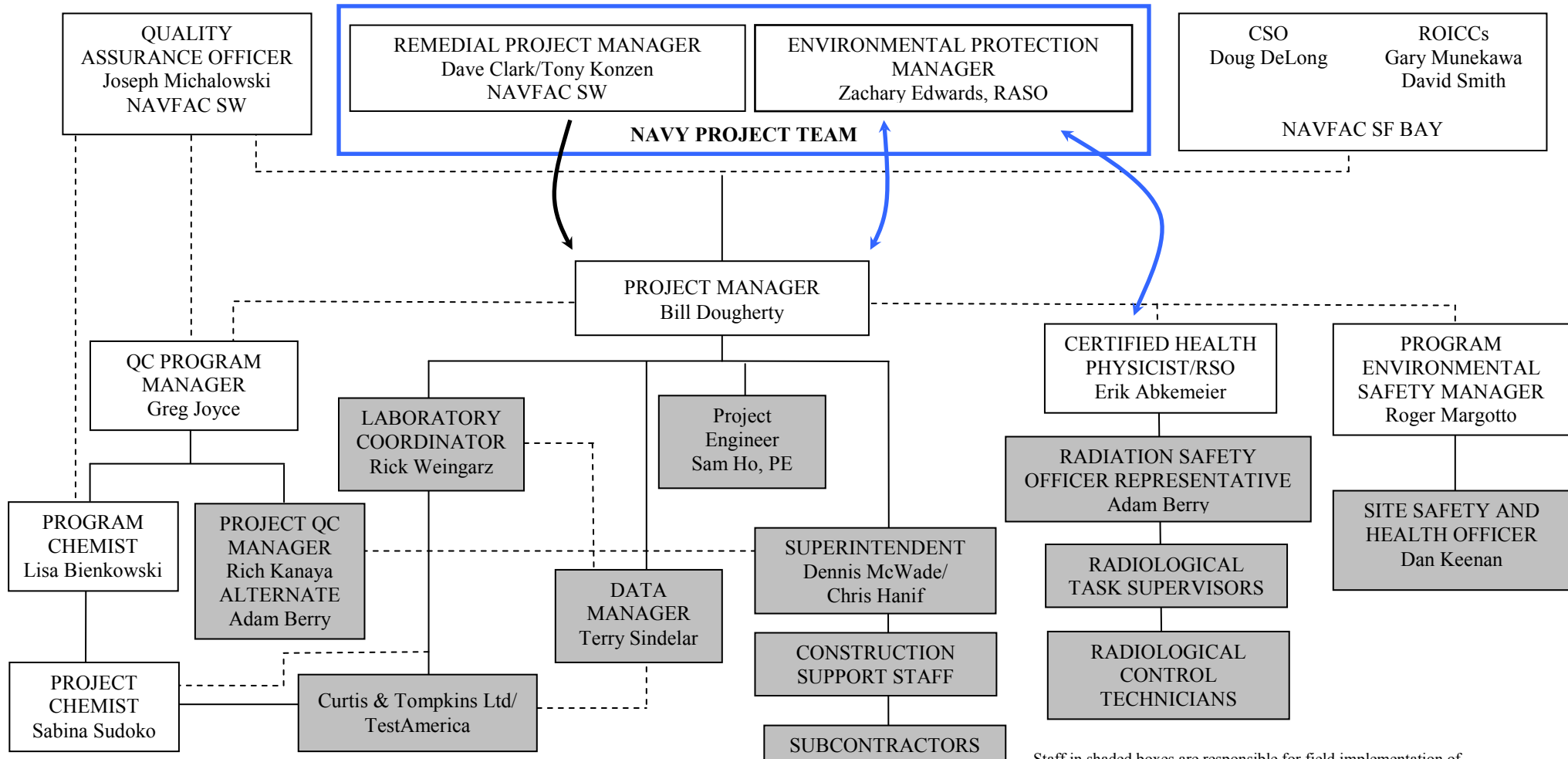
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FIGURES



FIGURE 1-2

PROJECT ORGANIZATION CHART



Abbreviations and Acronyms:

CSO – Contractor Site Office
 NAVFAC SW – Naval Facilities Engineering Command Southwest
 NTCRA – Non-Time-Critical Removal Action
 RASO – Radiological Affairs Support Office
 ROICC – Resident Officer in Charge of Construction
 RSO – Radiation Safety Officer
 QC – quality control
 SF – San Francisco

Legend

- Formal reporting relationship
- - - - Supporting relationship
- ↔ Primary lines of technical communication
- ↘ Line of technical direction (alternate where dashed)

Staff in shaded boxes are responsible for field implementation of activities under the NTCRA Work Plan.

The Construction Manager (Jeff Bray) has overall responsibility for coordinating the activities of on-site technical staff.